

To

**The Telecom Regulatory Authority of India**

**Mahanagar Doorsanchar Bhawan**

**Jawahar Lal Nehru Marg, New Delhi - 110002**

Dear Sir,

**Re: Responses to the Consultation Paper on Regulatory Framework for Over-the-top (OTT) Services (No. 2/2015)**

We are grateful to the TRAI for making available its Consultation Paper on regulatory framework for OTT services for public comments. We found the Consultation Paper to be timely. On behalf of our organisation, Alternative Law Forum, we have responded to the issues raised and questions asked in the Consultation Paper herewith.

The Alternative Law Forum, established in 2000, is a collective of lawyers and researchers who work on various issues of public interest. We have also been working and teaching in the area of media and internet laws and regulation for many years, and our members in the past have been part of expert groups constituted by the government, assisted in policy oriented research and also made submissions on a number of issues of public importance.

We hope you will take our recommendations into account.

**For Alternative Law Forum**

**122/4, Infantry Road**

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Smarika Kumar

**Question 1: Is it too early to establish a regulatory framework for OTT services, since internet penetration is still evolving, access speeds are generally low and there is limited coverage of high-speed broadband in the country? Or, should some beginning be made now with a regulatory framework that could be adapted to changes in the future? Please comment with justifications.**

We submit that some form of regulatory framework for OTTs is already available under various legislations (see our response to Q.5). Moreover we think that it is too early to establish an additional regulatory framework for OTT services, apart from the framework provided in these legislations, because of the following reasons:

**(a) Lack of comprehensive understanding of OTT functioning and regulatory issues**

It is pertinent that any sort of regulatory framework for OTT services be devised only upon an in-depth and contextual understanding of the issues surrounding them from the point of view of citizen and consumer interests. This should include a detailed understanding of the implications of any such regulatory framework upon:

- Competition in both OTT and TSP markets.
- Innovation in both OTT and TSP markets.
- Freedom of speech and implications for censorship on internet.
- Diversity of content accessible with the same ease on internet.
- Access to and expansion of reach and quality of service of internet connection and internet services for wired networks as well as wireless networks.
- Pricing and affordability of TSP internet connection for wired as well as wireless networks and OTT services.

Such comprehensive consideration of issues for a regulatory framework for the OTTs is currently missing from the TRAI Consultation Paper, and therefore at this point, we would hold that it is indeed too early to establish a regulatory framework for OTT services.

**(b) Lack of data concerning OTT and TSP services**

Additionally, there is a lack of availability of data concerning multiple aspects of in the TRAI Consultation paper. We think we cannot proceed to frame any regulatory framework without knowledge about several data including the following:

- Amount of data carted by various TSPs and ISPs as part of their internet services both over wired and wireless networks.
- Bandwidth capacities of various TSPs and ISPs in both their wired and wireless networks.
- Proportional usage of bandwidth by various OTTs over different TSPs and ISPs over both their wired and wireless networks.
- Details and data on current traffic management techniques used by each TSPs/ISPs over both their wired and wireless networks.
- Details of peering arrangements between different TSPs/ISPs both over their wired and wireless networks.

Without the availability of such data, it is impossible to make any informed comment on a regulatory framework for OTTs. In absence of such information, it is important that the Regulator does not hastily to proceed to make regulatory recommendations for OTTs at this point.

**Question 2: Should the OTT players offering communication services (voice, messaging and video call services) through applications (resident either in the country or outside) be brought under the licensing regime? Please comment with justifications.**

No, OTT players offering communication services should not be brought under the licensing regime because of the following reasons:

**(a) OTTs cannot legitimately be said to fall under “telegraph” under Telegraph Act, 1885.**

The prerogative for licensing telecommunications services stems from Section 4 of the Telegraph Act. Various communication networks have been read by courts to be included under the meaning of “telegraph.” In *Union of India v. S. Prakash*, the Allahabad High Court had held regarding the definition of “telegraph” under the Telegraph Act, “*The definition of 'telegraph' as given in the Act will also mean any appliance, instrument, or apparatus used for transmission or reception of signs, signals, writing images and sounds or intelligence of any nature through wire etc. including electricity and in view of this definition, which is of wide import, the word 'telegraph' means appliance, instrument or apparatus used for transmission or reception of signs, signals, images etc. through electric wires with the use of electricity or waves.*”<sup>1</sup> The Rajasthan High Court in *Shankar Birmiwala v. Union of India*<sup>2</sup> has held regarding the definition of “telegraph”, “*Since a telephone is an instrument used for transmission and reception of sound by wire, it is "telegraph" as defined in Section 3(1) of the Act and a telephone connection is a "telegraph line" as defined in Section 3(4) of the Act. The provision of a telephone connection is, therefore, governed by the provisions of the Act and the rules framed thereunder.*”

The above interpretations of “telegraph” under the Act imply that it refers to a physical appliance, instrument or apparatus, or a network which is capable of transmission of signals for communication.<sup>3</sup> OTTs on the other hand, form a part of the Application Layer of the internet, and ride on top of physical network and infrastructure, rather than being a part of it in both the TCP/IP and OSI models.<sup>4</sup> There is an inherent difference in the technology used by communications OTTs and TSPs for telephony and messaging—the former uses packet switching, while the latter uses circuit switching. For this reason, they cannot be classed as “similar services.” Therefore OTTs cannot be said to fall under the ambit of “telegraph” in the Telegraph Act, and therefore cannot legitimately be subject to a licensing regime.

**(b) OTTs do not fulfil the rationale for the licensing regime under the Telegraph Act, 1885.**

The Supreme Court in *Ministry of Information and Broadcasting v. Cricket Association of Bengal* has explained the rationale for the licensing regime for telecommunications infrastructure. It has held, “*There is no doubt that since the airwaves/frequencies are a public property and are also limited, they have to be used in the best interest of the society and this can*

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<sup>1</sup> *Union of India v. S. Prakash*, 1990 (2) AWC 957

<sup>2</sup> *Shankar Birmiwala v. Union of India*, AIR 1982 Raj 187

<sup>3</sup> See also Piyush Joshi, *Law Relating to Infrastructure Projects*, LexisNexis (2004), page 390

<sup>4</sup> The OSI Model's Seven Layers Defined and Functions Explained, available at <<https://support.microsoft.com/en-us/kb/103884>>, TCP/IP Protocol Fundamentals Explained With a Diagram, available at <<http://www.thegeekstuff.com/2011/11/tcp-ip-fundamentals/>>

<sup>5</sup> *Ministry of Information and Broadcasting v. Cricket Association of Bengal* AIR 1995 SC 1236

*be done either by a central authority by establishing its own broadcasting network or regulating the grant of licences to other agencies, including the private agencies.”* This implies that to be licensed, a telecommunications resource must fulfil two conditions: first, it must be a public property, and second it must be of scarce or limited nature. Communications OTT players fulfil neither of these conditions as they are transmitted as data packets which cannot be scarce, on top of TSP networks. This additionally reinforces that there is no legal rationale to apply the licensing regime under Telegraph Act to OTTs.

**(c) Licensing OTTs in this environment can adversely impact innovation and ease of access of smaller players to the OTT market.**

Licensing of OTTs can additionally create barriers for entry into the OTT market—currently it is an extremely low cost operation, but licensing can make OTT operations highly cost-intensive. This will allow big OTT players to dominate and reduce incentives for innovation and investment for smaller players by creating an oligopolistic OTT market. That is another reason to prevent creation of a licensing regime for OTTs.

**Question 3: Is the growth of OTT impacting the traditional revenue stream of TSPs? If so, is the increase in data revenues of the TSPs sufficient to compensate for this impact? Please comment with reasons.**

**We are unable to comment on this aspect without the relevant data available about TSPs and ISPs and from the Regulator on this issue. Access to data in this regard is pertinent to make any informed comment. Accordingly, we propose that the Regulator provide information and mandate OTTs and TSPs/ISPs to disclose data on the following aspects:**

- Amount of data carted by various TSPs and ISPs as part of their internet services both over wired and wireless networks, over the past 10 years.
- Proportion and amounts of data carried by TSPs/ISPs for different OTTs and the revenue earned from different OTTs on this data, over the past 10 years.
- Pricing for data charges and revenue earned by TSPs/ISPs through their data services on wired networks and on wireless networks, over the past 10 years.
- Bandwidth capacities of various TSPs and ISPs in both their wired and wireless networks, over the past 10 years.
- Proportional usage of bandwidth by various OTTs over different TSPs and ISPs over both their wired and wireless networks, over the past 10 years.
- Details and data on current and past traffic management techniques used by each TSPs/ISPs over both their wired and wireless networks.
- Details of current and past peering arrangements between different TSPs/ISPs both over their wired and wireless networks.

**Question 4: Should the OTT players pay for use of the TSPs network over and above data charges paid by consumers? If yes, what pricing options can be adopted? Could such options include prices based on bandwidth consumption? Can prices be used as a means of product/service differentiation? Please comment with justifications.**

We submit that OTT players should not pay for use of the TSPs network over and above data charges paid by both consumers and OTTs because of the following reasons:

- (a) TSPs already receive revenue for the usage of data from both consumers and OTTs, and to charge extra would be in violation of Article 14 of the Constitution.**

As has been pointed out in the TRAI Consultation Paper itself, TSPs/ISPs providing the internet network, simply speaking, operate in a two-sided market.<sup>6</sup> This means both OTTs and consumer-citizens are its consumers, and TSPs receive revenue from both OTTs and consumer-citizens for transportation of data over their network, and in proportion to the amount of data which is carted.

If OTT players are made to pay for use of the TSPs network over and above data charges paid by both them and customers, it would amount to double charging for the same data. This would be in violation of the Right to Equality under Article 14 of the Constitution<sup>7</sup>, since it would lead to a situation whereby different users of the internet get charged differently for the transportation of similar data.

- (b) Disproportionate consumption of bandwidth by different OTTs should be addressed by making bandwidth consumption fairer, not by allowing big OTTs to pay more for more bandwidth and throttle speech of others.**

Need for fairer consumption of bandwidth by different OTTs:-

We do however understand that some OTTs consume more bandwidth than other OTTs, due to their early entry in the market and dominance, and because of the kind of heavy data (for videos, images, gaming) they may need to transport. This disproportionate consumption has two implications:

- (i) It can lead to lack of media diversity on the internet, by reducing the speed of access to content of some OTTs because of large portions of bandwidths used by other OTTs.
- (ii) It additionally creates an unequal and unfair position whereby some OTTs by flooding the bandwidth with their heavy data can easily and speedily bring their content to consumers, while other OTTs have to suffer from low speeds created by such flooding.

The Supreme Court of India, considered a similar situation with regard to newspapers in its judgment of *Bennett Coleman and Others v. Union of India*.<sup>8</sup> The minority judgment by Justice Mathew in this opinion declared that lack of media diversity propounded by such effect and the unequal consumption of (bandwidth) resource respectively stand in violation of Article 19(1)(a)

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<sup>6</sup> Para 5.32 of TRAI Consultation Paper on Regulatory Framework for Over-the-Top Services, 27 March 2015, available at < <http://www.trai.gov.in/WriteReaddata/ConsultationPaper/Document/OTT-CP-27032015.pdf>>

<sup>7</sup> "14. Equality before law The State shall not deny to any person equality before the law or the equal protection of the laws within the territory of India Prohibition of discrimination on grounds of religion, race, caste, sex or place of birth."

<sup>8</sup> *Bennett Coleman and Others v. Union of India*.AIR1973 SC106

and Article 14 of the Constitution of India. This opinion has found support in the subsequent case of *Ministry of Information and Broadcasting v. Cricket Association of Bengal*<sup>9</sup> whereby media diversity has been declared as an essential part of Article 19(1)(a).

To address this issue of media diversity, Justice Mathew in his Bennett Coleman opinion stated that the infrastructure on which a newspaper runs, viz. limited newsprint needs to be equitably distributed within a limit. In other words, those who can afford owing to their business models, to purchase more newsprint (or use more bandwidth in context of the internet), should not merely be allowed to do so—because in such a scenario those who have deep pockets will be able to promote their speech (in internet context, make their content more accessible by using a larger portion of the bandwidth and slowing down the content of others). In interests of the consumer-citizens, viz. the right to access a diverse amount of information under Article 19(1)(a), such a scenario should not be allowed.

Governance model for achieving a fairer consumption of bandwidth by different OTTs:-

Regulation instead, must be designed so that consumption of bandwidth by different OTTs can be made more fairly, and not merely so that those with more money like dominant OTTs can make their content more accessible.

One way of doing this can be mandating an upper limit for each OTT for the use of bandwidth offered by each TSP/ISP. So if the upper limit is set to x% of the bandwidth for everyone, then no OTT will be allowed to consume more bandwidth than that at any given point in time. This model also needs to be adjusted for the kind of data which is flowing through the bandwidth—for example, if it is videos, VOIP, or gaming data, then probably different upper limits, (eg. y% of the bandwidth for all gaming traffic, and z% of this gaming traffic for each gaming OTT) needs to be set for the same depending on the demand for such kind of data, as such traffic will by its nature consume more bandwidth. Setting such separate upper limits for different kinds of data is important as quality of such services also needs to be ensured while controlling for media diversity. Exactly what these x, y, and z figures would be need to be calculated with use of the data we have listed in our response to Q.11.

Nothing in this model should require exchange of money between the OTTs and TSPs, as this model is designed with the citizen-internet consumer and her interests in getting diverse content, easy access, as well as a competitive and innovative market, at the centre.

**(c) Such bandwidth pricing will kill incentives for innovation for TSPs in traffic management, and need not necessarily provide incentives for investment in infrastructure.**

Bandwidth pricing will additionally kill incentives for TSPs in using innovative methods of traffic management so that there is less clogging and all content flows as easily. When particular OTTs pay TSPs extra for bandwidth, then TSPs will have actually have a disincentive to innovate in how to manage traffic so that other non-paying OTT's content is still accessible at reasonable speeds to consumer-citizens. Additionally, it is not necessary that this additional bandwidth revenue earned by TSPs will go into investments in upgrading and expanding their internet infrastructure. Since infrastructural investments are so cost-intensive, and since spectrum is limited especially in the mobile internet scenario, it is more likely in scenario of such bandwidth

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<sup>9</sup> *Ministry of Information and Broadcasting v. Cricket Association of Bengal* AIR1995 SC1236

pricing, that TSPs will improve access to certain OTT content at behest of others rather than investing in new infrastructure and upgrading bandwidth.

**Question 5: Do you agree that imbalances exist in the regulatory environment in the operation of OTT players? If so, what should be the framework to address these issues? How can the prevailing laws and regulations be applied to OTT players (who operate in the virtual world) and compliance enforced? What could be the impact on the economy? Please comment with justifications.**

We submit that unlike what is assumed by the TRAI Consultation Paper, OTT players DO NOT operate in a complete regulatory vacuum. There are several laws and legislations in place or being deliberated, which already provide a regulatory framework for the OTTs. These are as following:

**(a) Issues of security and commercial liability for OTTs are addressed via the Information Technology Act, 2000.**

We would like to remind the Regulator that the Preamble to the Information Technology Act, 2000 mentions that it is a legislation to “provide legal recognition for transactions carried out by means of electronic data interchange and other means of electronic communication, commonly referred to as "electronic commerce"”. The provisions and rules under the Act additionally cover grounds and procedures for security, encryption and key disclosure by OTTs.

We submit accordingly that Table 3.1 provided in the TRAI Consultation paper<sup>10</sup> comparing regulatory frameworks for TSPs and OTTs is extremely flawed as it does not take into account regulations mandated for OTT players through legislations. Regulatory framework for any entity may be established in three ways: Via legislations, via judicial interventions and orders and, via executive regulations which may or may not be enforced by TRAI. We submit that for the Regulator to ignore any regulatory framework for OTTs which is not enforced through it, is a very defective understanding of what it means to “regulate” OTT players. Therefore to say that there is no requirement at all for OTTs regarding “security conditions” and regarding “Monitoring services i.e. Lawful Interception and Monitoring”<sup>11</sup>, to omit that a major amount of security concerns are covered by existing legislations<sup>12</sup> and to omit acknowledging that activities like DoS, spreading of malicious software etc.<sup>13</sup> are actually covered by the Information Technology Act as criminal offences<sup>14</sup>, is inherently incorrect.

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<sup>10</sup> Page 43 of TRAI Consultation Paper on Regulatory Framework for Over-the-Top Services, 27 March 2015, available at <<http://www.trai.gov.in/WriteReaddata/ConsultationPaper/Document/OTT-CP-27032015.pdf>>

<sup>11</sup> Table 3.1 on Page 43 of TRAI Consultation Paper on Regulatory Framework for Over-the-Top Services, 27 March 2015, available at <<http://www.trai.gov.in/WriteReaddata/ConsultationPaper/Document/OTT-CP-27032015.pdf>>

<sup>12</sup> paras 3.20-3.23 of TRAI Consultation Paper on Regulatory Framework for Over-the-Top Services, 27 March 2015, available at <<http://www.trai.gov.in/WriteReaddata/ConsultationPaper/Document/OTT-CP-27032015.pdf>>

<sup>13</sup> Para 3.35 of TRAI Consultation Paper on Regulatory Framework for Over-the-Top Services, 27 March 2015, available at <<http://www.trai.gov.in/WriteReaddata/ConsultationPaper/Document/OTT-CP-27032015.pdf>>

<sup>14</sup> See section 43 of Information Technology Act, 2000

**(b) Issues of regulation of speech over OTTs are addressed via the Indian Penal Code, 1860 and the Information Technology Act, 2000.**

The Indian Penal Code as well as the Information Technology Act together provide a framework for addressing speech concerns over OTTs. There is a long history of applications of these legislations and their judicial interpretation in adherence with the Constitution of India.

In this context, it is extremely worrying when the Regulator seeks to address speech issues under the head of “Safety”<sup>15</sup> on the internet through additional regulation while ignoring that issues like stalking, child pornography, financial fraud etc. over the internet are already addressed through the Indian Penal Code and the Information Technology Act. There also seem to be suggestions that speech on OTTs be additionally regulated<sup>16</sup> on account of cultural sensitivities—which is an argument that tends to be unconstitutional. We are also very concerned that the Consultation Paper regards “that users of the social media websites express opinions freely without the usual social restraint” as a problem which needs regulation<sup>17</sup>, even though under our Constitution, speech can only be regulated when it falls under a ground given under Article 19(2) and no ground of lack of “social restraint” is enough to prohibit it.<sup>18</sup> Attempting any sort of regulation of speech over OTTs outside of this context would thus be blatantly unconstitutional.

**(c) Issues of consumer interests and their protection in respect of OTTs are addressed via Consumer Protection Act, 1986 as well as Indian Contract Act, 1872 and Sale of Goods Act, 1930.**

The Consumer Protection Act along with the Indian Contract Act and Sale of Goods Act forms the regulatory framework which can address the interests of consumers with respect to OTTs by providing for a mechanism to register and proceed on consumer complaints against OTTs, an appeals mechanism, provisions for protection for consumers in standard forms of contracts, false representation, fraudulent sales and sale of defective goods and services by OTT players.

So to argue, as has been done in the Consultation Paper, that consumer protection laws and rules do not apply to OTTs in the same way as they do to brick-and-mortar sellers<sup>19</sup> is inherently false. This is adequately illustrated by the multitude of cases concerning OTT services which have been brought before and addressed by consumer forums.<sup>20</sup>

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<sup>15</sup> Para 3.35 of TRAI Consultation Paper on Regulatory Framework for Over-the-Top Services, 27 March 2015, available at <<http://www.trai.gov.in/WriteReaddata/ConsultationPaper/Document/OTT-CP-27032015.pdf>>

<sup>16</sup> Para 3.24-3.26 of TRAI Consultation Paper on Regulatory Framework for Over-the-Top Services, 27 March 2015, available at <<http://www.trai.gov.in/WriteReaddata/ConsultationPaper/Document/OTT-CP-27032015.pdf>>

<sup>17</sup> Para 3.25 of TRAI Consultation Paper on Regulatory Framework for Over-the-Top Services, 27 March 2015, available at <<http://www.trai.gov.in/WriteReaddata/ConsultationPaper/Document/OTT-CP-27032015.pdf>>

<sup>18</sup> See most recently, Supreme Court judgment in *Shreya Singhal and Others v. Union of India* (March 2015), available at <<http://courtnic.nic.in/supremecourt/temp/wr%2016712p.txt>>

<sup>19</sup> Para 3.34 of TRAI Consultation Paper on Regulatory Framework for Over-the-Top Services, 27 March 2015, available at <<http://www.trai.gov.in/WriteReaddata/ConsultationPaper/Document/OTT-CP-27032015.pdf>>

<sup>20</sup> See for eg., *Ebay India Pvt Ltd v Ajay Kumar*, available at <http://indiankanoon.org/doc/140261623/>, *Rediff.com India Ltd v. Urmil Munja*, available at <http://indiankanoon.org/doc/119372137/> and *MD, Air Deccan v. Sri Rama Aggarwala*, available at <<http://indiankanoon.org/doc/130317199/>>

**(d) Issues of unfair business practices and competition concerning OTTs are addressed through The Competition Act, 2002.**

The Competition Act, 2002 seeks to address anti-competitive and unfair practices of businesses, including that of OTT players. Accordingly, the Competition Commission of India has been investigating the business practices of the OTT player, Google, to determine if its search and advertising practices violate competition law in the country.<sup>21</sup> So when the Consultation paper raises concerns about the unfair business models and lack of search neutrality of OTTs which is funded through advertising<sup>22</sup>, it is to be remembered that competition law already provides a regulatory framework to regulate such businesses. Additional regulation may be needed in this regard, but that needs to be arrived at only after comprehensive understanding of such additional regulations on competition, innovation, ease of accessibility and diversity in OTT services.

**(e) Issues of intellectual property, copyright and trademarks infringements concerning OTTs are addressed through Indian Copyright Act, 1957, Trademarks Act, 1999 and the Patents Act, 1970.**

Infringement of copyright, trademarks, and patents, along with conditions for and exceptions to the same, have already been defined under Indian Copyright Act, 1957, Trademarks Act, 1999 and the Patents Act, 1970, respectively—all of which are applicable to OTT players in relevant contexts and read along with intermediary liability provisions of the Information Technology Act and its interpretation in line with the Constitution.<sup>23</sup>

So it becomes extremely problematic when the Consultation Paper remarks that, “There have been suggestions to throttle speeds of such websites or OTTs that provide pirated content or have a history of doing so. The intention is to make sure that content providers become increasingly conscious of their errors.”<sup>24</sup> Any such move would bypass the safeguards of the abovementioned legislations through unregulated use of their gatekeeping power by the TSPs. It would be unabashedly unconstitutional and propagate a chilling effect on speech and knowledge sharing on the internet, by giving TSPs/ISPs the power to decide what constitutes pirated content and then make access to it difficult, when this decisive power is exclusively reserved for the Judiciary under our Constitution<sup>25</sup>.

**(f) Issues of privacy are addressed through the Privacy Bill, 2014 and Information Technology Act, 2000.**

Article 21 of the Constitution has been interpreted to include a right to privacy. Additionally, there have been discussions regarding a comprehensive Privacy Bill tabled in the Parliament,

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<sup>21</sup> See CCI receives probe report on Google anti-trust case (Mint, April 8 2015) available at <<http://www.livemint.com/Companies/DEMIk0TU90D3hoCdnYgWN/CCI-receives-probe-report-on-Google-antitrust-case.html>>

<sup>22</sup> Para 5.48 of TRAI Consultation Paper on Regulatory Framework for Over-the-Top Services, 27 March 2015, available at <<http://www.trai.gov.in/WriteReaddata/ConsultationPaper/Document/OTT-CP-27032015.pdf>>

<sup>23</sup> See most recently, Supreme Court judgment in *Shreya Singhal and Others v. Union of India* (March 2015), available at <<http://courtnic.nic.in/supremecourt/temp/wr%2016712p.txt>>

<sup>24</sup> Para 3.36 of TRAI Consultation Paper on Regulatory Framework for Over-the-Top Services, 27 March 2015, available at <<http://www.trai.gov.in/WriteReaddata/ConsultationPaper/Document/OTT-CP-27032015.pdf>>

<sup>25</sup> See Article 19(1)(a) read with Article 32 of Constitution of India.

which carves out protection for sensitive data on the internet.<sup>26</sup> The Consultation Paper's concerns over users' privacy leading to implications for the nation's security and financial health, cracking phishing, privacy, identity theft, child pornography and cyber extortion<sup>27</sup> are currently addressed by Information Technology Act, Indian Penal Code<sup>28</sup>, and in future, by the Privacy Bill.

**(g) No OTT regulation can operate outside the ambit of the Constitution of India.**

Lastly, the operation of all OTTs must fall under the scope of Constitution of India, and no regulation of OTTs can stand to be in the violation of Constitutional safeguards and Part III embodying Fundamental Rights.

In light of such legislations already existing to provide a regulatory framework for OTTs, it is extremely dangerous for the Regulator to suggest questions in the Consultation Paper which ignore their presence and application to OTTs. If any of the abovementioned frameworks are found inadequate, imbalanced or lacking, the right route to take is a democratic engagement with the Legislature via relevant MPs to consider amendment of laws, or through petitions in Courts.

For the Regulator to take a backdoor approach to address relevant concerns through creation of additional barriers without a bearing in law for the operation of OTTs is highly undesirable. Creation of such barriers through imposition of technological constraints by giving gatekeeper TSPs/ISPs the arbitrary power to decide which OTT content can flow on their networks will constitute the very violation of the rule of law and will be in ignorance of Constitutional safeguards.

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<sup>26</sup> Elonnai Hickok, Leaked Privacy Bill: 2014 v. 2011 (Centre for Internet and Society, 31 March 2014), available at <<http://cis-india.org/internet-governance/blog/leaked-privacy-bill-2014-v-2011>>

<sup>27</sup> Para 3.26 of TRAI Consultation Paper on Regulatory Framework for Over-the-Top Services, 27 March 2015, available at <<http://www.trai.gov.in/WriteReaddata/ConsultationPaper/Document/OTT-CP-27032015.pdf>>

<sup>28</sup> See Section 43 of Information Technology Act, 2000, and Section 292 of Indian Penal Code.

**Question 6: How should the security concerns be addressed with regard to OTT players providing communication services? What security conditions such as maintaining data records, logs etc. need to be mandated for such OTT players? And, how can compliance with these conditions be ensured if the applications of such OTT players reside outside the country? Please comment with justifications.**

We have already described the existing regulatory framework for security concerns and privacy in our response to Q5. above. This framework includes prescription to OTTs to maintain data records, logs, unencrypt etc. specifically under Sections 43A, 72A, 69 and provisions under Chapter V of the Information Technology Act

If any of such frameworks are found inadequate, imbalanced or lacking, then the constitutional route to take is a democratic engagement with the Legislature via relevant MPs to consider amendment of laws, or through petitions in Courts.

The issue of ensuring compliance with this question is a jurisdictional issue, and can be addressed by imposing the condition that all OTTs catering to the Indian market must declare that they need to submit to the law of the land. Dominant OTT players with a large market share in India, can additionally be mandated to have a server in India if they operate in the Indian market. None of these approaches need to employ licensing of or prior approval for the operation of OTTs.

**Question 7: How should the OTT players offering app services ensure security, safety and privacy of the consumer? How should they ensure protection of consumer interest? Please comment with justifications.**

We have already described the existing regulatory framework for security, safety concerns, privacy and consumer interests in our response to Q5. above. If any of such frameworks are found inadequate, imbalanced or lacking, then the constitutional route to take is a democratic engagement with the Legislature via relevant MPs to consider amendment of laws, or through petitions in Courts.

**Question 8: In what manner can the proposals for a regulatory framework for OTTs in India draw from those of ETNO, referred to in para 4.23 or the best practices summarised in para 4.29? And, what practices should be proscribed by regulatory fiat? Please comment with justifications.**

We do not think that the ETNO principles should be imported in the Indian context as they fall short of fulfilling the five principles we put forward (discussed in more detailed in our responses to Q.9. and Q.12.) as essential in a governance framework for OTTs and TSPs/ISPs. These are:

- Preservation of the **Net Neutrality** principle.<sup>29</sup>
- Ensuring **Competitive Markets** for TSPs/ISPs and for OTTs.
- Promoting **Media Diversity** on Internet.
- Enhancing **Access** to the Internet (by enhancing **Reach, Quality of Services, and Affordability** of Internet Connections)
- Fostering **Innovation** in both TSPs and OTTs markets.

All the three principles proposed by ETNO, by allowing for monetary exchange between OTT players and TSPs/ISPs for enhancing ease of access to certain OTT content over others on the internet, can easily violate the principle of media diversity on the internet (see our response to Q.4., point(b) for more details).

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<sup>29</sup> Our definition of net neutrality refers to the state where the gatekeepers to the internet (including ISPs, TSPs) are subject to a governance framework in order to ensure they do not use their power to unfairly discriminate between similarly situated persons, content, or traffic. (see our response to Q.9. for more details)

**Question 9: What are your views on net-neutrality in the Indian context? How should the various principles discussed in para 5.47 be dealt with? Please comment with justifications.**

We submit that net neutrality must be preserved in the Indian context. To explain this stand, we propose the following definition of net neutrality.

### **Our definition of “net neutrality”**

For us, net neutrality means the state where the gatekeepers to the internet (including ISPs, TSPs) are subject to a governance framework in order to ensure they do not use their power to unfairly discriminate between similarly situated persons, content, or traffic.

It is this abovementioned understanding of net neutrality which we submit must be preserved at all cost, since it upholds a nuanced principle of equality. We additionally submit that any governance framework for net neutrality should not be considered in isolation. Any governance framework for net neutrality must ensure the fulfilment of the following additional principles:

- Ensuring **Competitive Markets** for TSPs/ISPs and for OTTs.
- Promoting **Media Diversity** on Internet.
- Enhancing **Access** to the Internet (by enhancing **Reach, Quality of Services, and Affordability** of Internet Connections)
- Fostering **innovation** in both TSPs and OTTs markets.

### **Models for ensuring “net neutrality”**

There can be several models to ensure this definition of net neutrality, while adhering to the abovementioned principles. Such models may include regulation for net neutrality, creating market conditions to ensure that the abovementioned principles are fulfilled, or through a combination of the two. Which of these models should ultimately be chosen will depend on the effectiveness it caters to all the above mentioned principles, including net neutrality. To pinpoint any one such model at this point in time would be premature due to lack of data and information in this regard.

### **Dealing with Principles discussed in para 5.47**

The principles discussed in para 5.47 can all fall under the principles described above, along with net neutrality. Each principle needs to be ensured in a governance framework for TSPs/OTTs, and none of the principles mentioned above can be conflated with another. This means that separate mechanisms to cater to each of them need to be ensured in order to create an effective regulatory framework.

#### **a. Effective competition among TSPs and user choice**

We would like to point out that net neutrality is not always enough to ensure effective competition. As explained above, net neutrality refers to a governance model which prevents unjust discrimination, and not something which will necessarily or by itself ensure a competitive market for either ISPs/TSPs, or for OTTs. Effective competition in these markets need to be ensured by low barriers to entry in the relevant markets as per competition law and regulations, even apart from a governance framework for net neutrality.

b. Transparency/Open Standards

Use of transparent, opens standards, mandatory disclosure norms, and is extremely important to fulfil interests of the consumer-citizen. We have discussed this in more detail in our responses to Q.11 and Q.13. This also needs to be addressed along with but as a distinct objective from net neutrality principle.

c. Switching Costs

Switching costs for TSP/ISPs will be low for users when there is enough competition and there are enough players in the TSP market for the consumer to choose from. The multiplicity of TSP players in each relevant geographic market needs to be ensured apart from competition.

d. Quality of Service Assurances

Quality of Services for TSP functioning need to be created by creating enough competition and multiplicity of players in the relevant geographical market, apart from mandating minimum quality of service norms in TSP license agreements. This also needs to be considered along with but as a distinct objective from net neutrality principle.

Apart from these principles of para 5.47, there are other principles that need to be addressed in a regulatory framework for TSPs, as has been discussed above.

**Question 10: What forms of discrimination or traffic management practices are reasonable and consistent with a pragmatic approach? What should or can be permitted? Please comment with justifications.**

As we have discussed in our response to Q.4, discrimination and traffic management practices by TSPs and ISPs should be permitted as long as they do not violate the principle of net neutrality, competition, innovation, diversity and access as defined in our response to Q9. This would imply the following:

- Discrimination and traffic management for countering spam over the TSP network may be permitted.
- Discrimination and traffic management for routing narrowly defined emergency services and calls over the TSP network can be permitted.
- Zero-rated traffic may be permitted as long as the market for zero-rated traffic is competitive, innovative and diverse—this would mean that exclusive and/or prohibitive agreements erecting high barriers to entry between OTTs and TSPs/ISPs for zero-rated traffic should be prohibited.
- Paid prioritisation of traffic must not be permitted (see our response to Q.4), viz., no OTT should be able to make access to its content easier upon payment at behest of other similar OTT services.

**Question 11: Should the TSPs be mandated to publish various traffic management techniques used for different OTT applications? Is this a sufficient condition to ensure transparency and a fair regulatory regime?**

Yes, TSPs must be mandated to publish various traffic management techniques they use for different OTT applications, on both their wired and wireless networks. No, this is NOT a sufficient condition to ensure transparency and fair regulatory regime, because as discussed in our response to Q3., various other kind of mandatory data disclosure by TSPs and OTTs are as important to construct and ensure a fair regulatory regime. To reiterate, these must include, but may not be limited to, the mandated disclosure of the following information:

- Amount of data carried by various TSPs and ISPs as part of their internet services both over wired and wireless networks, over the past 10 years.
- Proportion and amounts of data carried by TSPs/ISPs for different OTTs and the revenue earned from different OTTs on this data, over the past 10 years.
- Pricing for data charges and revenue earned by TSPs/ISPs through their data services on wired networks and on wireless networks, over the past 10 years.
- Bandwidth capacities of various TSPs and ISPs in both their wired and wireless networks, over the past 10 years.
- Proportional usage of bandwidth by various OTTs over different TSPs and ISPs over both their wired and wireless networks, over the past 10 years.
- Details of current and past peering arrangements between different TSPs/ISPs both over their wired and wireless networks.

**Question 12: How should the conducive and balanced environment be created such that TSPs are able to invest in network infrastructure and CAPs are able to innovate and grow? Who should bear the network upgradation costs? Please comment with justifications.**

Like we have stated in our response to Q9., a balanced and conducive environment for both TSPs and CAPs/OTTs can be created when the governance framework for the same adheres to the following principles:

- Preservation of the **Net Neutrality** principle.<sup>30</sup>
- Ensuring **Competitive Markets** for TSPs/ISPs and for OTTs.
- Promoting **Media Diversity** on Internet.
- Enhancing **Access** to the Internet (by enhancing **Reach, Quality of Services, and Affordability** of Internet Connections)
- Fostering **Innovation** in both TSPs and OTTs markets.

### **Models for bearing of Network Upgradation Costs**

We suggest a few models here for bearing of network upgradation costs. The model which most effectively adheres to the abovementioned principles in this regard must be chosen. In absence of relevant data in the Indian context, we are unable to comment at this point what exactly that model might be.

- (i) Model 1: Utilisation of USOF for creation of municipal infrastructure by the Government.**

Governments, till now, have not utilised the Universal Service Obligation Fund (USOF) created for the expansion and upgradation of telephony and internet services to all parts of the country. The USOF is collected as a percentage of revenues of all TSPs and is part of their license agreement with the Government, for this very purpose. In this manner, the Government has actually not used large sums which it does have to bear network upgradation costs. These must be utilised and a deadline for their utilisation must be set.

- (ii) Model 2: Re-evaluation of USOF contribution obligation by TSPs and mandate to directly upgrade infrastructure.**

In light of lack of utilisation of USOF, another model might be to directly mandate the TSPs to upgrade their infrastructure by amending their licensing terms. Under this model, the percentage of revenue which is currently being contributed to USOF should be reduced, or terminated, and instead, TSPs should be directly mandated to use that percentage of their revenues for upgradation of their networks and infrastructure. Adequate transparency and diligence safeguards should be put forth to ensure that TSPs do use that percentage of their revenues for network upgradation. Cancellation of TSP licenses can be the repercussion if they fail to do so.

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<sup>30</sup> Our definition of net neutrality refers to the state where the gatekeepers to the internet (including ISPs, TSPs) are subject to a governance framework in order to ensure they do not use their power to unfairly discriminate between similarly situated persons, content, or traffic. (see our response to Q.9. for more details)

**(iii) Model 3: Creation of a net-neutral Public Service ISP to create market incentives for network upgradation by private TSPs/ISPs.**

A third model might be the use of a public service ISP to create competition and conditions in the market which will incentivise other TSPs/ISPs to upgrade their networks. In their paper “The Public Option: A Nonregulatory Alternative to Net Neutrality”<sup>31</sup>, Columbia professor and IEEE member Vishal Misra and Richard Ma, Assistant Professor at National University of Singapore, use game theory modelling of ISP transactions to suggest that the creation of a public service ISP can actually help create such conditions. It is argued that investment by the municipalities into a creation of a public service ISP which uses upgraded infrastructure will drive competition for other TSPs/ISPs, and thus incentivise their investments in such upgradation. This will benefit consumers in terms of prices, choice and quality. Additionally the municipality will also be able to earn revenue through such public service ISP. This model has proved efficient in Stockholm where the city laid fiber (raising money through municipal bonds), customers have 100 Mbps Internet at one quarter the price of what customers pay in the US for a connection that is 1/10th the speed.<sup>32</sup>

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<sup>31</sup> Richard T.B.Ma and Vishal Misra, The Public Option: A Non-Regulatory Alternative to Network Neutrality (IEEE, 2012), available at [http://dna-pubs.cs.columbia.edu/citation/paperfile/212/ToN\\_PublicOption.pdf](http://dna-pubs.cs.columbia.edu/citation/paperfile/212/ToN_PublicOption.pdf)

<sup>32</sup> Linda Crane, Net Neutrality is All Good and Fine, The Real Problem is Elsewhere (University of Columbia), available at <http://www.cs.columbia.edu/2014/net-neutrality/>

**Question 13: Should TSPs be allowed to implement non-price based discrimination of services? If so, under what circumstances are such practices acceptable? What restrictions, if any, need to be placed so that such measures are not abused? What measures should be adopted to ensure transparency to consumers? Please comment with justifications.**

As we have discussed in our responses to Q.4 and Q.10, non-price based discrimination of services can be allowed by TSPs within a regulatory framework to foster and promote media diversity, access and equality among OTT players on the internet. Additionally some non-price based discrimination which is done for the management of spam can continue, and similar discrimination for traffic concerning narrowly-defined “emergency services” may be allowed.

To prevent abuse and ensure transparency for consumers in this regard, the following measures must be adopted:

- TSPs must never be allowed to do such discrimination in an ad-hoc manner. It must flow from legally established regulatory frameworks as discussed in our response to Q.4.
- Disclosure norms concerning the traffic management techniques being used by TSPs for each OTT and different kinds of OTT traffic should be mandated, as discussed in our response to Q.11.
- Spam and emergency services should be clearly and narrowly defined in this regard.
- Consumer-citizens should have a platform to report, question, complain, and appeal violation of the disclosure norms, and of the regulatory framework established for a non-price based discrimination of services.

**Question 14: Is there a justification for allowing differential pricing for data access and OTT communication services? If so, what changes need to be brought about in the present tariff and regulatory framework for telecommunication services in the country? Please comment with justifications.**

No, there is no justification for allowing differential pricing for data access and OTT communication services, because of the following reasons:

**(a) OTT communication services and TSP telephony are two inherently different technologies and cannot be classed as “similar services.”**

OTT communication services are based on packet-switching technology, whereas TSP telephony is based on circuit-switching technology. Because of this inherent difference in the technologies they employ, OTT communication services and TSP telephony cannot be classed as “similar services” even when they might seek to serve the same ends. TRAI Recommendations on Internet Telephony of 2008 themselves recognise this.<sup>33</sup> Therefore, it is irrational to class to different technologies in the same box and aim to work out a common pricing and regulatory mechanism for the two.

**(b) The quality of OTT communication services is still not at par with TSP telephony.**

Quality of OTT communication services is still worse off than TSP telephony in India. Most of the mobile internet connection in India, which still constitutes a large part of internet usage operates on 2G. This keeps the quality of OTT communication services low as packets drop easily and calling services cannot keep up with the quality of TSP telephony. Based on this quality of services differentiation, TRAI Recommendations on Internet Telephony<sup>34</sup> did not class them as similar services which need to be priced differently from other internet data. There is rationale for this understanding to still continue.

**(c) Lack of data in the Indian context analysing OTT call quality and substitution of revenues of TSP telephony by OTT communication services.**

There is a lack of concrete data and studies in the Indian context regarding the impact of OTT communication services, OTT call quality, spread of its usage and user experience, and comparative analysis with TSP telephony and if OTT communications are really affecting revenues of TSP telephony, and if yes, by how much. Unless such data is released, it will be extremely premature to comment on or devise a regulation for differential pricing for data access and OTT communication services.

**(d) Even in a scenario of falling revenues from TSP telephony, the burden of innovation and innovative business models in the TSP market should be borne by TSPs, and not sought to be covered by burdening OTT communication services.**

Even if it is found that revenues from TSP telephony are falling at behest of competition from the different technology of OTT communication services, the burden should be on TSPs to use and develop innovative technologies and business models to recover this falling revenue. If OTT

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<sup>33</sup> TRAI Recommendations on Issues Related to Internet Telephony, August 18, 2008, available at <http://www.trai.gov.in/WriteReadData/Recommendation/Documents/recom18aug08.pdf>

<sup>34</sup> TRAI Recommendations on Issues Related to Internet Telephony, August 18, 2008, available at <http://www.trai.gov.in/WriteReadData/Recommendation/Documents/recom18aug08.pdf>

communication services are sought to be regulated because TSPs cannot compete accordingly, then it will merely slow down the progress in adopting newer technologies like packet switching in our communication on a wide scale. Such a regulation would be against innovation and technological progress.

**Question 15: Should OTT communication service players be treated as Bulk User of Telecom Services (BuTS)? How should the framework be structured to prevent any discrimination and protect stakeholder interest? Please comment with justification.**

No, OTT communication service players should not be treated as Bulk User of Telecom Services, as it would stand in violation of the principles of innovation (already explained, see part (c) in our response to Q.4) and media diversity (already explained, see part (b) in our response to Q.4).

**Question 16: What framework should be adopted to encourage India-specific OTT apps? Please comment with justifications.**

We submit that conditions which foster the principles of competition, innovation, access, net neutrality and diversity in both the TSP and OTT markets will ultimately be beneficial and will encourage India-specific OTT apps which are demanded by consumer-citizens. Accordingly a regulatory framework (as discussed in our response to Q.9) which adheres to these principles will ultimately encourage deserving India-specific OTT apps as well as be in interests of Indian citizen-consumers.

**Question 17: If the OTT communication service players are to be licensed, should they be categorised as ASP or CSP? If so, what should be the framework? Please comment with justifications.**

We have submitted that OTT communication service players should not be licensed as there exists no legal rationale to impose a licensing system upon them (please see our response to Q.2).

**Question 18: Is there a need to regulate subscription charges for OTT communication services? Please comment with justifications.**

At this point, we think that there is no need to set an upper or lower limit for subscription charges of OTT communication services. From point of view of consumer-citizen most of such services are affordable and accessible. Additionally, OTT communication services can be adequately differentiated from TSP traditional telephony at this point in time, both in terms of technology employed and in terms of service quality (see our response to Q.14). Therefore regulation of subscription charges to bring it on par with services which are actually not similar, is uncalled for.

**Question 19: What steps should be taken by the Government for regulation of non-communication OTT players? Please comment with justifications.**

As we have pointed out in our response to Q.5., unlike what is assumed by the Consultation Paper, no OTT player, including non-communication OTT players exist in a regulatory vacuum. There are legislations which regulate non-communication OTT players. (Please refer to our response to Q5. for details on this.)

If any of such frameworks are found inadequate, imbalanced or lacking, then the constitutional route to take is a democratic engagement with the Legislature via relevant MPs to consider amendment of laws, or through petitions in Courts. (See our response to Q5. for reasons).

**Question 20: Are there any other issues that have a bearing on the subject discussed?**

Overall, we found a comprehensive understanding of an OTT/TSP governance framework missing from the Consultation Paper. We think it should have addressed questions of such a governance model using the principles of competition, innovation, diversity, access, and freedom of speech in an integrated manner, which it did not. Specifically we feel that issues of diversity of internet content and freedom of speech in light of regulation for OTTs, as well as creating conditions for innovation in the TSP and OTT markets have not been adequately addressed in the Consultation Paper.